Contents

Bennici, A., s. Lupi, C. 185

Blest, A. D., Sigmund, Claudia: Retinal Mosaics of a Primitive Jumping Spider, *Spartaeus (Salticidae: Araneae)*: A Transition Between Principal Retinae Serving Low and High Spatial Acuities 129

Blest, A. D., Sigmund, Claudia: The Cytoskeletal Architecture of Interdigitated Microvilli in the Photoreceptors of Some Nocturnal Spiders 153

Brent Heath, I., s. McKerracher, Lisa J. 162

Buchen, Brigitte, s. Hejnowicz, Z. 219

Cline, K., Keegstra, K., Staehelin, L. A.: Freeze-Fracture Electron Microscopic Analysis of Ultrarapidly Frozen Envelope Membranes on Intact Chloroplasts and After Purification . 111

Cunninghame, M. E., Hall, J. L.: A Quantitative Stereological Analysis of the Effect of Indoleacetic Acid on the Dictyosomes in Pea Stem Epidermal Cells 230

Dall'Olio, G., s. Vannini, G. L. 199

Espelie, K. E., s. Griffith, Marilyn 53

Falconer, Marcia M., Seagull, R. W.: Immunofluorescent and Calcofluor White Staining of Developing Tracheary Elements in *Zinnia elegans* L. Suspension Cultures 190

Gennai, D., s. Lupi, C. 185

Graham, E. T., s. Joshi, P. A.. 75

Green, J. C., s. Hori, T.. 140

Griffith, Marilyn, Huner, N. P. A., Espelie, K. E., Kolattukudy, P. E.: Lipid Polymers Accumulate in the Epidermis and Mestome Sheath Cell Walls During Low Temperature Development of Winter Rye Leaves 53

Hall, J. L., s. Cunninghame, M. E. 230

Henney, H. R., Jr., s. White, Hiltrud U. 36

Hejnowicz, Z., Buchen, Brigitte, Sievers, A.: The Endogenous Difference in the Rates of Acropetal and Basipetal Cytoplasmic Streaming in *Chara* Rhizoids is Enhanced by Gravity 219

Hori, T., Green, J. C.: The Ultrastructure of Mitosis in *Isochrysis galbana* Parke (*Prymnesiophyceae*) 140

Huner, N. P. A., s. Griffith, Marilyn 53

Inouye, Isao, Pienaar, R. N.: Ultrastructure of the Flagellar Apparatus in *Pleurochrysis* (Class *Prymnesiophyceae*) . . 24

Janisch, R.: Formation of the Plasma Membrane During Regeneration of *Paramecium caudatum* 94

Joshi, P. A., Stewart, J. McD., Graham, E. T.: Localization of β-Glycerophosphatase Activity in Cotton Fiber During Differentiation 75

Keegstra, K., s. Cline, K. 111

Kolattukudy, P. E., s. Griffith, Marilyn 53

Kowal, R. R., s. Newcomb, E. H. 1

Kuroiwa, T., Nakamura, S., Sato, C., Tsubo, Y.: Epifluorescent Microscopic Studies on the Mechanism of Preferential Destruction of Chloroplast Nucleoids of Male Origin in Young Zygotes of *Chlamydomonas reinhardtii* 43

Larsen, J., Nilsson, Jytte R.: A New Principle of Cell Cultivation: No Air-Liquid Interface but Gas Exchange Across a Synthetic Membrane 214

Lucas, W. J., s. Pesacreta, Th. C. 173

Lupi, C., Bennici, A., Gennai, D.: *In vitro* Culture of *Bellevalia romana* (L.) Rchb. I. Plant Regeneration Through Adventitious Shoots and Somatic Embryos 185

Mattsson, O., s. Schou, O. 65

McKerracher, Lisa J., Brent Heath, I.: Microtubules Around Migrating Nuclei in Conventionally-Fixed and Freeze-Substituted Cells 162

Menzel, D.: Fine Structure Study on the Association of the Caulerpalean Plastid with Microtubule Bundles in the Siphonalean Green Alga *Chlorodesmis fastigiata* (Ducker, *Udoteaceae*) 103

Mollenhauer, H. H., s. Morré, D. J. 86

Morré, D. J., Mollenhauer, H. H.: Involvement of Endoplasmic Reticulum in the Origins of Dictyosome-Like Structures of Guinea Pig Spermatocytes. 86

Nakamura, S., s. Kuroiwa, T.. 43

Newcomb, E. H., Tandon, Sh. R., Kowal, R. R.: Ultrastructural Specialization for Ureide Production in Uninfected Cells of Soybean Root Nodules. 1

Nilsson, Jytte R., s. Larsen, J. 214

Pancaldi, Simonetta, s. Vannini, G. L. 199

Pesacreta, Th. C., Lucas, W. J.: Presence of a Partially-Coated Reticulum in Angiosperms 173

Pienaar, R. N., s. Inouye, Isao 24

Platt-Aloia, Kathryn, s. Thomson, W. W.. 13

Poli, F., s. Vannini, G. L. 199

Sato, C., s. Kuroiwa, T.. 43

Schou, O., Mattsson, O.: Differential Localization of Enzymes in the Stigmatic Exudates of *Primula obconica* 65

Seagull, R. W., s. Falconer, Marcia M. 190

Sievers, A., s. Hejnowicz, Z. 219

Sigmund, Claudia, s. Blest, A. D. 129, 153

Staehelin, L. A., s. Cline, K. 111

Steveninck, J. van, s. Tijssen, J. P. F. 124

Stewart, J. McD., s. Joshi, P. A. 75

Suzuki, Y., s. Ueda, K. 205

Tandon, Sh. R., s. Newcomb, E. H. 1

Thomson, W. W., Platt-Aloia, Kathryn: The Ultrastructure of the Plasmodesmata of the Salt Glands of *Tamarix* as Revealed by Transmission and Freeze-Fracture Electron Microscopy. 13

Tsubo, Y., s. Kuroiwa, T. 43

Tijssen, J. P. F., Van Steveninck, J.: Cytochemical Staining of a Yeast Polyphosphate Fraction, Localized Outside the Plasma Membrane 124

Ueda, K., Suzuki, Y.: Changes in Osmotic Pressure and Structure at the Initial Stages of Zygote Formation in *Closterium ehrenbergii* 205

Vannini, G. L., Poli, F., Pancaldi, Simonetta, Dall'Olio, G.: Alterations Induced by Dimethyl Sulfoxide in *Euglena gracilis* with Emphasis on the Side Effects 199

White, Hiltrud U., Henney, H. R., Jr.: Adenine Inhibits Microcyst Formation in *Physarum flavicomum* and Affects the Cellular Level of S-Adenosylmethionine 36